

No.: 10/647,341

AMENDMENTS TO THE ABSTRACT

Please amend the abstract as attached:

ABSTRACT OF THE DISCLOSURE

This invention relates to an optical transmission system which allows high quality transmission of signal light where a plurality of signal channels are multiplexed, and has a configuration that is particularly suitable for CWDM optical transmission. In the optical transmission system, the plurality of signal channels propagating through the optical fiber transmission line are demultiplexed into a signal channel group in the first wavelength band Λ_1 and a signal channel group in the second wavelength band Λ_2 . Then, each signal channel in the second wavelength band Λ_2 where the absolute value of chromatic dispersion is large is dispersion-compensated. When the bit rate is B (Gb/s) at a specific wavelength in the second wavelength band Λ_2 where the total chromatic dispersion in the optical fiber transmission line and the dispersion compensator is highest, the chromatic dispersion value at this specific wavelength is set to be ~~grater~~ greater than 0 (ps/nm) but $7500/B^2$ (ps/nm) or less, and is set such that the loss in the second wavelength band Λ_2 is lower than the highest loss in the first wavelength band Λ_1 .